

# Fangruida: Integration of 10 major drugs for clinical application of drugs for effective treatment of new and new coronavirus pneumonia and redundant design of drugs for clinical application--"Virus bio-missile", "Coronavirus pneumonia (respiratory severe pneumonia infectious disease) alphabetic bio-missile"

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## Key words

New Coronavirus Severe Pneumonia, White Pneumonia Pneumonia Integration of 10 Drugs and Drug Redundant Design Technology Compound Drugs Chemical Drug Structure Modification and Pure Plant Drugs

●● Neocoronavirus pneumonia actually has the characteristics and considerable commonalities of coronary pneumonia (Sars et al.), Severe pneumonia, white lung disease pneumonia, and epidemic infectious infection pneumonia, and their respective specificities. It is a new virus pneumonia and an extension of traditional infectious severe pneumonia. This fully demonstrates the evolution and genetic variation of the natural biological world, including microorganisms and animals, and humans.

●● Studies on the pathogenesis and pathogenicity of new coronaviruses (including various virus inhibitors) and the development of effective and efficient fast-acting drugs

●● The new type of coronavirus pneumonia is not incurable. It does not exceed AIDS cancer. Most patients can recover and recover to health. Vulnerable populations and critically ill patients have higher mortality rates.

●● Coronavirus pneumonia and coronavirus are not unfamiliar to humans. They are a large-scale epidemic of common and susceptible diseases in animals and humans. Such infectious diseases are easily ignored and misjudged by humans, and they are most likely to cause large areas Quick start and spread. The coronavirus will exist in the biological nature for a long time. Its occult, rapid, repetitive, and variability will not easily and completely withdraw from the human, animal and plant world.

●● The severity of the patient's illness and individual differences and other factors vary in the use of clinical treatment drugs, which need to be tailored to local conditions, tailored to people, and treated according to disease. Biochemical and compound drugs, pure plant drugs, and vaccines are the key to symptomatic prevention and treatment.

●● New coronavirus pathogens and animal viruses are absolutely closely related. Animal coronavirus is the same as animal coronavirus pneumonia and zoonotic virus pneumonia, with considerable analogy. Although the pathogenic host is difficult to find out for a while, there is not much objection from animals.

●● Effective and efficient treatment and treatment of new coronavirus pneumonia << 5 + 2 medical plan >>, << 7 + 3 medical plan >> 10 new drugs for clinical application of new and new coronavirus pneumonia Integration and redundant technical solutions, first of all, in the absence of specific drugs and vaccines, medical scientists, pharmacologists, pathologists, infectious disease scientists, virologists and clinicians and nurses need to work together Integrated technology and redundant technology of drugs to treat the life and health of patients with new type of coronavirus pneumonia.

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A natural active drug with antiviral activity and targeting property-poison crown anti-inhibition complex. This type of conjugate introduces natural active drugs into antiviral medicinal chemistry through chemical grafting, and is physically mixed with a ligand-phytoside purified product with targeted delivery ability to form a natural active drug-targeting complex. Self-assembled nano-micelles are characterized by: 1) the ability to target delivery, improve virus suppression and fire suppression, reduce adverse reactions, and increase patient tolerance; 2) the hydrophobic core formed by hydrophobic groups can physically encapsulate resistance Viral drugs can significantly improve the compatibility and use of antiviral and antiviral drugs; 3) Through chemical coupling and physical encapsulation of antiviral drugs, the effects of combined antiviral and antiviral treatments can be achieved and toxic side effects can be reduced. 4) The preparation method of the compound drug invention is simple, and the raw materials are firstly chemical structure modification-chemical intermediates-natural plant purification and purification-chemical medium-chemical combination-physical mixing, chemical European Union and physical mixing-specific trace elements, easy to operate, The yield is high, the cost is low, the application is wide, and it is easy to realize industrialization. 5) It is widely used in anti-virus, virus suppression, virus inactivation, and bacteriotoxicity, etc. Indications: Coronavirus infection, bacterial virus erosion, respiratory infectious disease pneumonia, general viral disease suppression, immunity enhancement Pneumonia, pulmonary respiratory infections, etc. 6) Prevention and treatment of chemical conjugate compound reactions, trace element configuration can produce chemical antagonism and chemical reaction resistance, strengthen drug targeting functions, form biological missiles, and avoid side effects such as drug dispersion. 7) This drug is an antiviral-toxic crown inhibitory compound, which also has obvious curative effects and significant effects on animals. Trade name "Poison Crown Anti-Inhibitory Spirit". Oral medication, tablets, and liquids are generally divided into compound tablets and split tablets.

(1) Combination of main and auxiliary drugs (2) Combination of biochemical and compound drugs, plant drugs, (3) Reasonable and effective combination of antiviral drugs and immune drugs, gene drugs, pneumonia drugs, and other physical treatments (for general new models) Coronary pneumonia patients with mild disease, such as ordinary patients, can effectively compare to 65.8-95.9%. Due to different epidemics, different degrees of danger, individual differences between races and patients, medical resources and technical means and other differences Difference) Technical means such as surgery

(4) Including cpu ventilator, artificial lung, intubation, etc. Especially for critical populations (5) screening and rational application of coronavirus pneumonia drugs for animals

, Toxic and side effects, compatibility taboos, clinical application risk assessment, etc., should be scientifically and rationally used according to the specific situation of the epidemic situation, patient and so on.

A mature high-end medical technology, an advanced cutting-edge medical solution, a new type of drugs and vaccines and perfect applications are essential for the treatment and rescue of patients and critically ill patients, especially the large-scale acute epidemic of infectious plagues worldwide At the moment when the earth appeared overwhelmingly, the world was generally caught off guard by sincerity and panic. The scientific spirit, rigorous and realistic, was especially important. This is true for a large number of medical doctors and nurses in the countries affected by the epidemic. Many people are eager to develop new drugs and special-effect drugs, and develop new vaccines to fight the plague. The mood is understandable, but, without waiting, one life will be lost in one minute. It is urgent that China, Italy, Iran, South Korea, Japan, the United States and other epidemic areas Countries and regions. Therefore, the effective and efficient treatment of new coronavirus pneumonia in the clinical application of << 5 + 2 medical plan >>, << 7 + 3 medical plan >> is the only correct first choice. Empty talk and fantasies will not help. Race against time to rescue and save the lives of more infected people worldwide is of great significance and far exceeds the Nobel Prize in Medicine and the Nobel Peace Prize for 1,000 times and 10,000 times. At the critical moment when the highly dangerous new type of coronavirus pneumonia sneaked on all human beings in the world, there was no savior to save and save mankind in the world, only the great mankind himself, especially the warriors who were in charge regardless of life and death.

累计 The total number of confirmed cases of new crown pneumonia in the world has exceeded 150,000. The World Health Organization said on the 15th that the total number of confirmed cases of new crown pneumonia worldwide has exceeded 150,000. At present, the number of confirmed cases of new coronary pneumonia outside China has increased to 143, and the number of new cases per day in many countries has exceeded a thousand.

(Quoted from network resources, etc.) As of the writing of this article, new coronavirus pneumonia has swept over a dozen countries around the world, Asia Europe America Oceania Africa, almost all over the world, except for Antarctica Arctic It is estimated that the total number of cases can reach 200,000 to 300,000. Suspected patients or close contacts isolate the observers by several million to tens of millions, and the death can reach more than 10,000 to 20,000. It should directly go to the lives and health and safety of nearly 8 billion people worldwide. The focus is on countries and regions such as Asia, Europe, Wuhan, Japan, South Korea, Italy, Iran, and whether the epidemic is repeated. It will take months or six months for the epidemic to end. It is still under analysis and follow-up observation. Eurasia is a severely affected area.

<< 5 + 2 medical plan >> << 7 + 3 medical plan >> is a basic treatment plan. The clinical application needs to be flexible and applied according to the specific situation such as epidemic situation, ethnicity, individual patient differences, etc., and is not rigid. These treatments are effective and are practical for general patients, which can greatly reduce deaths, greatly reduce the transfer of mild patients to critically ill patients, and can save more lives, including high-risk groups such as the elderly, the weak and the disabled.

Coronaviruses are systematically classified as Coronaviridae (Coronaviridae). Coronavirus is a positive-stranded single-stranded RNA virus with an envelope of about 80-120 nm in diameter. Its genetic material is the largest of all RNA viruses and only infects humans, mice, pigs, cats, dogs, and poultry. vertebrate. A variant of coronavirus is the pathogen that causes atypical pneumonia and belongs to the RNA virus. Coronavirus was first isolated from chickens in 1937. The diameter of the virus particles is 60-200nm, with an average diameter of 100nm. It is spherical or oval and has polymorphism. The virus has an envelope, and there are spinous processes on the envelope. The entire virus looks like a corona, and the spinous processes of different coronaviruses are significantly different. Tubular inclusions are sometimes seen in coronavirus-infected cells.

In the medical field, three points of medicine and seven points of medicine. This shows that drugs are vital to the health of human life and often play a decisive role.

Coronavirus particles are irregular in shape and have a diameter of about 60-220nm. Viral particles are enveloped by fatty membranes, and there are three glycoproteins on the membrane surface: spike glycoproteins; small envelope glycoproteins; membrane glycoproteins are responsible for the transmembrane transport of nutrients, the emergence of new virus buds, and the formation of virus envelopes). A few species also have hemagglutinin glycoproteins. Coronavirus's nucleic acid is non-segment single-stranded (+) RNA with a length of 27-31kd. It is the longest RNA nucleic acid strand in RNA viruses and has important structural characteristics unique to positive-strand RNA: that is,

the 5' end of the RNA strand is methylated. Hat ", with a PolyA" tail "structure at the 3' end. This structure is very similar to eukaryotic mRNA, and is also an important structural role for its genomic RNA itself to play the role of a translation template, eliminating the RNA-DNA-RNA transcription process. Coronavirus has a very high recombination rate between RNA and RNA, and the virus mutates due to this high recombination rate. After recombination, the RNA sequence has changed, and the amino acid sequence encoded by the nucleic acid has also changed. The protein composed of amino acids has changed accordingly, which has caused its antigenicity to change. As a result of changes in antigenicity, the original vaccine failed and immunity failed.

Viral RNA polymerase, which is required for RNA virus replication, does not exist in the coronavirus mature particles. After entering the host cell, it directly uses viral genomic RNA as a translation template to express viral RNA polymerase. This enzyme is then used to complete the transcription and synthesis of the negative-strand subgenomic RNA, the synthesis of various structural protein mRNAs, and the replication of viral genomic RNA. There is no post-transcriptional modification and shearing process for the synthesis of mature mRNA of each structural protein of coronavirus, but directly through RNA polymerase and some transcription factors, using a "discontinuous transcription" mechanism to recognize specific transcriptional regulatory sequences. Selectively transcribe from the negative-sense RNA one-time all the components that make up a mature mRNA. After the replication of structural proteins and genomic RNA is completed, new coronavirus particles will be assembled at the host's endoplasmic reticulum and secreted outside the cell through the Golgi apparatus to complete its life cycle.

Coronavirus is one of the main pathogens of the common cold in adults. It can cause upper respiratory tract infections in children and spread to the lower respiratory tract. The incubation period for coronavirus infection is usually 2 to 5 days, with an average of 3 days. Typical coronavirus infections have cold symptoms such as runny nose and discomfort.

Different types of viruses have different pathogenicity and cause different clinical manifestations. The symptoms caused by OC43 strain are generally more severe than those of 229E virus. Coronavirus infections have been reported to cause fever, chills, and vomiting. The course of disease is usually about 1 week, the clinical course is mild, and there are no sequelae.

Coronavirus can also cause acute gastroenteritis in infants and newborns. The main symptoms are watery stools, fever, and vomiting. More than 10 times a day, bloody stools can occur in severe cases.

Coronavirus infections have been reported in the literature to produce the following clinical symptoms:

- 1) Respiratory infections, including severe acute respiratory syndrome (SARS);
- 2) Intestinal infections (occasional infants);
- 3) Neurological symptoms (rarely).

Coronavirus is excreted through respiratory secretions, and is transmitted through oral fluid, air injection, and contact. Clinically, most coronaviruses cause mild and self-healing diseases, but a few may have neurological complications. Coronavirus infections are extremely common around the world.

So far, about 15 different coronavirus strains have been found that can infect a variety of mammals and birds, and some can cause disease in humans.

Human diseases caused by coronavirus are mainly respiratory infections (including severe acute respiratory syndrome, SARS). The virus is sensitive to temperature and grows well at 33 ° C, but it is suppressed at 35 ° C. Because of this characteristic, winter and early spring are the epidemic seasons of the virus disease. Coronavirus is one of the main pathogens of the common cold in adults.

The growth of the virus is mostly in epithelial cells. It can also infect the liver, kidneys, heart, and eyes. It can also grow in other cell types (such as macrophages). At present, there is no suitable animal model for human coronavirus to be used for research (animal model of human disease) refers to animals with simulated performance of human diseases established in various medical scientific research. Animal disease models are mainly used in experimental physiology , Experimental pathology and experimental therapeutics (including the screening of new drugs), so the coronary disease - -- nasal mucosal cells can only be isolated after organ culture. It is also difficult to use the above materials for the propagation of viruses.

Coronavirus serotypes and antigenic variability are unknown. Coronaviruses can have repeated infections, indicating that they have multiple serotypes (at least four are known) and have antigenic variations, and their immunity is difficult. There are currently no specific preventive and therapeutic drugs.

Coronavirus is excreted through respiratory secretions, transmitted through oral fluid, sneeze, and contact, and transmitted through air droplets. The infection peaks in autumn, winter, and early spring. The virus is sensitive to heat. Ultraviolet rays, Lysol water, 0.1% peroxyacetic acid, and 1% keliaolin can kill the virus in a short time.

There is specific prevention for its prevention, that is, targeted preventive measures (the development of vaccines and vaccines is possible, but it takes a long time to solve the problem of virus reproduction is its problem) and non-specific preventive measures (that is, prevention of spring respiratory infections) Measures, such as wearing a mask, keeping warm, washing hands, ventilating, avoiding excessive fatigue and contact with patients, and going to public places with fewer people, etc.). Electron microscope observations revealed that the envelopes of these viruses have spinous processes that resemble corona, so it is proposed to name these viruses as coronaviruses.

Coronaviruses were first isolated from chickens in 1937. In 1965, the first human coronavirus was isolated. It was named "Coronavirus" because it can be observed under the electron microscope that there are obvious stick-like particle protrusions on its outer membrane, making its shape look like the crown of medieval European emperors.

In 1975, the Coronavirus Division was officially named by the Viral Naming Committee. According to the serological characteristics of the virus and the differences in nucleotide sequences, the Coronaviridae family is currently divided

into two genera, Coronavirus and Cyclovirus. The representative strain of the Coronavirus family is Avian infectious bronchitis virus (IBV).

The severe acute respiratory syndrome (Severe Acute Respiratory Syndrome, SARS, SARS) that raged around the world from the winter of 2002 to the spring of 2003 is one of the coronaviridae, a coronavirus genus.

In 1953, American molecular biologist James Watson and British physicist Francis Crick proposed a famous model of DNA double helix structure based on X-ray diffraction analysis performed by Wilkins and Franklin. Further explanation is that the gene carrier is DNA. Further research proves that a gene is a segment of a DNA molecule. Every gene mutation and many diseases are involved, such as oncogenes and tumor suppressor genes involved in tumorigenesis.

From a chromosomal perspective there are

Missing

2. Repeat

3. inverted

4. Translocation

By function

Loss of function mutation

2. Submorphonic mutation

3. Supermorphonic mutation

4. Mutation to gain function

Classification by mutation principle

Point mutation

2. Silent mutation

3. missense mutation

4. Frameshift mutation

5. Nonsense mutation

(1) The basic unit of genes is deoxynucleotides.

(2) The sequence of deoxynucleotides in genes is called genetic information.

(3) The diversity of the sequence of deoxynucleotides in genes determines the diversity of genes.

Pathological study of Sars, Ebra and new coronavirus: "Tissue organs lung immune organs other organs SARS [9-10, 12, 15] pulmonary edema, pulmonary consolidation, pulmonary hemorrhage, diffuse exudative alveoli Injury: early desquamative alveolitis and exudative lesions, extensive hyaline membrane formation in advanced stages, accompanied by severe inflammation and necrosis, partial alveolar epithelial hyperplasia and fusion, and part of the cell cytoplasm containing eosinophilic virus inclusions, There are a large number of mononuclear macrophages in the alveolar cavity, and CD68 is positive for immunohistochemical staining. The lungs in the recovery period showed organic pneumonia. Electron microscopy showed that alveolar type II epithelial cells and monocyte macrophages were actively growing in the alveolar cavity. Clusters of virus particles. Spleen and lymph node hyperemia and hemorrhage, spleen atrophy, and large spleen tissue necrosis; lymph node vessels are highly dilated, lymph nodules disappear, and tissue sheet necrosis; mononuclear macrophage hyperplasia in lymph sinus; focal necrosis of other lymph tissue Etc. Multi-organ microangitis, focal necrosis of parenchymal organ tissues, inhibition of bone marrow granulocyte system and megakaryocyte system. MERS [20-21] Diffuse exudative alveolar damage, alveolar septal destruction and expansion, type II alveolar epithelial cell proliferation and shedding, large sheet edema fluid with bleeding and fibrin exudation, transparent membrane formation, partial alveolar septum and alveolar cavity are seen in varying amounts Mononuclear-macrophages and multinucleated giant cells with bronchial epithelial shedding and mild to moderate lymphocyte infiltration under the bronchial mucosa. Dense circular viruses with dense spike-like structures are seen in lung cells and macrophages under electron microscopy. In each lymph node, there were reduced lymphoid follicles, multi-vesicular proliferation of polymorphic immunoblasts and reactive lymphocytes, and a large number of immunoblasts and reactive lymphocytes in the spleen. Multi-organ microvasculitis, lymphocytic infiltration, local Necrotic inflammatory foci. COVID-19 [28-29] Early pulmonary edema, protein exudation, thickening of interstitial lung, multinucleated giant cells and macrophage infiltration in the alveolar cavity, etc., but the formation of transparent membranes is not obvious. End stage Diffuse alveolar injury in both lungs with fibrous mucus-like

exudate, pulmonary edema, shedding of alveolar epithelial cells, formation of clear membranes, and lymphocytic interstitial inflammation. Cell infiltration, large nuclear, amphiphilic granular cytoplasm, and prominent nucleoli are characterized by viral cell changes. Multinucleated giant cells are seen in the alveoli. Still lacking. There is a small amount of inflammatory infiltration of a few monocytes in the myocardial stroma.

(Recited from "Review and Prospect of the Pathological Features of Coronavirus Pneumonia Wang Huijun, Du Sihao, Yue Xia, Chen Chuanxiang" (Forensic Identification Center, School of Law, Southern Medical University, Guangzhou 510515, China))

After the outbreak of the new coronavirus, scientists around the world are testing the clinical response of different drugs in order to find the right drug as soon as possible.

There is currently no specific medicine against the virus, and clinical treatments are generally used to help patients improve their immunity and maintain body function. In view of the fact that it takes several years for new drugs to develop from mass production, if existing drugs are used, time can be greatly saved. Therefore, the drugs currently used to treat patients with new types of coronavirus in countries around the world are mainly those that have been developed or marketed. It is unrealistic to try to develop special-effect drugs at a rapid speed. Therefore, drugs related to the suppression of new coronavirus pneumonia have become Internet celebrities and hot searches. Scientists around the world are racing, fighting for time, and fighting against illness. The vaccine development is proof. However, the most scientific and effective methods are drug screening and the improvement and modification of the chemical structure of existing drugs, as well as biochemical drugs, compound drugs, plant drugs, gene drugs, etc. targeted at targets, the development of biological missiles and viral missiles, etc. Efficient, reliable and fast applied in clinical.

Vaccines, monoclonal antibodies, oligonucleotide therapies, peptides, interferon therapies, and small molecule drugs. A number of "potentially effective drugs" against neocrown virus have surfaced, including anti-HIV drugs lopinavir / ritonavir, anti-Ebola drug radsivir, anti-flu drugs fapivir, abi Dole, and chloroquine phosphate

"Virus bio-missile", "Coronavirus pneumonia (respiratory severe pneumonia infectious disease) alphabetic bio-missile" (biochemical drug modification and improvement + plant refined substance = trace element inhibitor

"Virus bio-missile", "Coronavirus pneumonia (respiratory severe pneumonia infectious disease) alphabetic bio-missile" (biochemical drug modification and improvement + plant refined substance = trace element inhibitor), leading drugs, auxiliary drugs, immune drugs and other scientific and reasonable Combination, applied to the clinic, suitable for viral pneumonia virus infection. English abbreviation "VBM" "CPPAbM >>

Enhances and suppresses the function of various immune-active cells.

Control and repair major bio-amplification systems.

Utilizes, regulates, and inhibits immune factors such as lymphokines released by T cells and antibodies synthesized by B cells.

Feline infectious peritonitis (FIP) is one of the important causes of cat death.

## 2.

The wells of the microtiter plate are coated with purified coronavirus antigen. Protein A from *Staphylococcus aureus* combines with HRP to form a complex. Serum or plasma samples are incubated with protein A enzyme markers in the wells of the microplate. If FCoV antibodies are present in the cat sample, the antibodies will bind to the antigen in the well and then to the protein A enzyme label. The excess enzyme-labeled protein A was washed away and a chromogenic substrate was added. A clear blue color indicates the presence of FCoV antibodies, and no color change indicates no FCoV antibodies. The kit has high specificity and sensitivity, simple operation, and the results can be known within 30 minutes. The kit includes positive quality control and negative quality control. Just by comparing the color with the negative quality control with the naked eye, you can accurately determine the presence of FCoV antibodies in the sample.

Under the microscope, most bacterial viruses are found to be different from animal and plant viruses in that they have a complex morphology of head and tail structures. According to the tail, it can be divided into three types: long, short and retractable tail sheath. There are two types of icosahedral bacterial viruses without tails. One type has 1 nodule on each of the 12 horns. The appearance is mulberry-like, and the other type does not have this structure. A small number of bacterial viruses are filaments or equiaxed polyhedrons of  $760 \times 6$  to  $1950 \times 6$  nanometers, with spikes or brush-like spikes at the top of each corner.

The head of the bacterial virus in a composite form is a three-dimensional symmetrical polyhedron, which is generally 50 to 60 nanometers in diameter and some is more than 130 nanometers. The structure of this type of bacterial virus is more complicated.

Bacterial viruses are mainly composed of nucleic acids and proteins. A few bacterial viruses contain small amounts of non-nucleic acid sugars or lipids. The protein mainly forms the head shell, tail and accessories of the bacterial virus shell or complex. The protein portion is antigenic. Therefore, injecting it into animals can produce specific antibodies, and the neutralizing antibodies can prevent the bacterial virus from adsorbing on the outer wall of the bacteria, thereby preventing the infection from occurring, but without inactivating the bacterial virus. Different bacterial viruses can be distinguished based on antigen specificity.

Nucleic acids make up the genome of a bacterial virus. Bacterial viruses contain only one type of nucleic acid, either DNA or RNA, or double-stranded or single-stranded, or linear or circular. Most bacterial viruses contain dsDNA.

Bacterial viruses have the same DNA as other organisms, and are made by polymerizing nucleotides. Most bacterial virus DNA is the same as normal DNA and contains 4 bases-adenine (A), guanine (G), thymine (T), cytosine (C), and complies with Watson-Crick's A = T, G = C base pairing principle.

Bacterial viruses can exist in three states with different structures and functions: ① mature infectious or free phages outside the bacterial cell; ② vegetative or growing phages inside the bacterial cell; ③ prophages formed by integration on the bacterial cell chromosome. Free bacterial virus encounters sensitive host bacteria, and infection occurs under appropriate conditions. The bacterial virus first adsorbs to the bacteria. The tailed bacteria virus attaches its tail wire to a certain receiving point on the surface of the bacteria. Due to the tail wire bending, The tail needle and the tail plate are fixed to the bacteria. Subsequently, the bacterial virus tail sheath contracts, and the exposed tail shaft penetrates into the outer wall of the bacteria. The DNA is injected into the bacteria through the tail shaft, leaving the protein shell outside the bacteria. Male-specific bacterial viruses are adsorbed on the flagella of bacteria, and nucleic acids may be injected

through this.

After the bacterial virus DNA is injected into the bacteria, it enters a nutritional state and multiplies. For example, after T even phage infection, *E. coli* itself immediately stops the synthesis of DNA and protein, and receives the genetic information of the bacterial virus, and synthesizes the products required by the bacterial virus. Within 1 minute after infection, some mRNA (messenger ribonucleic acid) molecules of the bacterial virus are synthesized, and then various proteins encoded by the early genes of the bacterial virus are synthesized, most of which are related to the synthesis of bacterial virus DNA and its precursors.

As for the bacterial viruses of RNA and ssDNA, each has its own unique replication process, and the progeny of the linear phage can be released without lysing the host bacteria.

After the phage DNA is injected into the host bacteria, it enters the trophic state and completes the bacterial virus proliferation cycle. This type of bacterial virus is called a virulent phage. There is also a type of bacterial virus that does not choose the above-mentioned proliferation pathway after infection with bacteria, but integrates its DNA into the bacterial chromosome and becomes a prophage state.

Lysogenic bacteria have the potential to produce bacterial viruses and immunity to related bacterial viruses, sometimes accompanied by changes in other traits. Called lysogenic conversion. It is now known that the different traits of many fungi are affected by lysogenicity. For example, the production of toxins by diphtheria is due to the structural genes of toxin proteins in their prophages; the production of certain hemolysins of *Staphylococcus aureus* is related to lysogenicity; the structure of antigens such as *Salmonella* and *Shigella* is also related to lysogenic.

If the prophage excised from the chromosome of the lysogenic bacteria fails to enter the trophic state in the cell and thus fails to proliferate, the host bacteria will continue to survive and reproduce, so the derived strain will lose the prophage and lysogenicity. , Called a retreatment strain. Some traits changed by lysogenization will also be restored with lysogenic retreatment.

When the prophage in a lysogenic bacteria leaves the host chromosome and proliferates for some known (e.g., induced) or unknown (spontaneous) reason, a small number of bacterial virus genomes carry genes from neighboring hosts, and when they infect When a strain is introduced, the host gene can be introduced and recombined to show the characteristics of the gene.

3.

Pulmonary angiography includes selective and non-selective

Bullosa refers to the increased pressure in the alveolar cavity caused by various reasons. After the alveolar wall ruptures, they fuse with each other. The air-containing cysts formed in the lung tissue are classified into congenital and acquired. Congenital is more common in children, mainly due to congenital bronchial dysplasia, mucosal folds are valvular, and cartilage dysplasia, which results in valve action. Acquired in adults and elderly patients, often with chronic bronchitis, emphysema, chronic obstructive pulmonary disease, old tuberculosis and other basic diseases. Patients may experience symptoms of chest tightness and shortness of breath. If the bullae are infected, cough, sputum, fever, and chills may occur, and cyanosis of the lips may occur in severe cases. A small number of patients with bullae have symptoms of hemoptysis and chest pain. The chest CT examination can be used to determine the size and location of the bullae.

Pulmonary fibrosis is medically called pulmonary interstitial fibrosis. It is caused by various reasons for the large amount of deposition of cellulose and fibrous scars in the interstitial lung, causing breathing difficulties, often coughing, white phlegm, and shortness of breath after activities. Pulmonary fibrosis can be light or severe. If mild fibrosis is treated with drugs, some patients can be reversed. For example, the commonly used drugs are N-acetylcysteine and nidanib. Severe pulmonary fibrosis is indeed more difficult to treat.

White lung generally refers to the performance of severe pneumonia under x-ray examination, and the lungs are named after a large white. Generally predicts that 90% of the lungs are infiltrated by inflammation. White lung disease is a disease with a high mortality rate in severe pneumonia. White lung generally refers to the performance of severe pneumonia under X-ray examination, and the lungs are named after a large white. The formation of white lung usually indicates that the lungs are infiltrated by inflammation.

Ground-glass changes in the lungs are mainly due to a decrease in air content in the alveoli, a relatively increase in the number of cells, a thickening of the alveolar space, and a partial filling of the airways on weekends. Ground-glass changes are just a description of medical imaging. Many reasons can cause ground-glass changes, such as inflammatory lesions, focal fibrosis, atypical adenoma-like hyperplasia, and alveolar hemorrhage. The type of ground-glass nodules in the lung. Typical ground-glass nodules change to solid nodules of the lung, and the edges of normal internal structures are clear.

The causes of "white lung disease" are often caused by infections, including bacterial infections, viral infections, and atypical pathogenic infections. When bacteria or viruses are infected, they can cause the exudation of inflammatory substances, pulmonary interstitial congestion and edema, etc., leading to decreased lung function. The development of "white lung disease" is often very rapid, causing diffuse lesions of both lungs in a short period of time. In addition to infectious factors, interstitial pneumonia and radiation pneumonitis can also cause "white lung disease". Secondly, drug damage factors can also cause "white lung", the most common being pulmonary fibrosis caused by paraquat poisoning.

"White lung disease" symptoms

The most important symptom of "white lung disease" is hypoxia, and the symptoms of hypoxia cannot be easily

improved by inhaling oxygen. Due to diffuse lesions of the lungs, lung function is severely impaired, and patients will have severe symptoms of hypoxia, such as chest tightness, asthma, Symptoms such as dyspnea and respiratory distress may cause cough; patients often experience respiratory failure and symptoms such as coma. In the first treatment of white lung disease, a ventilator should be used to relieve the patient's hypoxic symptoms. White lung disease often develops rapidly. If no timely and effective treatment is available, if the patient's hypoxic symptoms are not corrected in time, it will be due to respiratory failure in a short time. Death, followed by actively looking for the cause and treatment of the cause.

Severe pneumonia, only the lungs, is very serious and can be infected by viruses, bacteria, and fungi. Viruses and bacteria are common. Severe pneumonia, obvious breathing difficulties, high fever and so on. Severe pneumonia is mainly caused by poor immunity and strong invasion of pathogens, which can cause severe pneumonia in a short time. Double lung white lung

① Respiratory frequency  $\geq 30$  beats / min; ② Hypoxia, oxygenation index of blood gas analysis is less than 250; ③ Multiple lung lobe infiltration; ④ Psychological consciousness is unclear; ⑤ Hypernitrosemia, urea nitrogen is greater than 20; ⑥ WBC count is less than  $4.0 \times 10^9 / L$ ; ⑦ Platelet count is less than  $10.0 \times 10^9 / L$ ; ⑧ Low body temperature ( $T < 36^\circ C$ ); ⑨ Low blood pressure, which requires fluid or booster resuscitation.

There are many types of pneumonia, including respiratory infections such as bacterial and viral pneumonia Sars, etc. The differential diagnosis is complex. Coronavirus pneumonia often has the same clinical manifestations and is easy to miss and misdiagnose. It is most likely to cause infection and spread of the disease without Found by a doctor. Sars, Middle East Respiratory Syndrome, Ebola virus, Viral pneumonia, Bacterial pneumonia, White lung disease, Severe pneumonia, etc. are often intertwined. At the same time, there are great similarities and similar symptoms. Pathological reports and clinical test reports There are also many similarities between the index and the value, which makes it more difficult to diagnose and treat new coronavirus pneumonia and prevent and prevent it. Neocoronavirus pneumonia actually has the characteristics and considerable commonalities and respective specificities of coronary pneumonia (Sars et al.), Severe pneumonia, white lung disease pneumonia, and epidemic infectious infection pneumonia. A large number of cases were compared and verified with each other, and the true appearance of the new coronavirus was undoubtedly exposed. Therefore, the reason why the 2019 new type of coronary disease pneumonia rages around the world and sweeps the world, its dangerous spread of infectious and lethality is quite stubborn and dangerous, and it has no choice but to wait. Human lung structure is very important. It is the most important physiological organ and tissue structure of human beings. It is also an important place for erosion and infection by various bacterial viruses. Especially susceptible people in winter and spring are extremely likely to occur and spread, especially for animals. Contact spread. Viral infection is currently the main infectious disease in the world, accounting for more than 3/4 of the infectious disease species. Due to the application of a large number of antibiotics, non-viral infections have been effectively controlled, but viral infections have become increasingly prominent. With the development of virology and molecular biology in recent years, a deeper understanding of the specific enzymes of viral replication, the viral replication cycle, and the mechanism of action of antiviral drugs has promoted the research on antiviral drugs, including anti-herpes virus drugs. rapid development.

Because of its characteristics, bacterial viruses have become the object of research in various aspects such as the replication, transcription, recombination of nucleic acids (DNA and RNA), the regulation and control of gene expression, and the relationship between viruses and hosts, promoting virology and molecular biology. The development of genetics. As a carrier of genes, it has also become a useful tool in the research of genetic engineering. Bacterial viruses rely on specific lytic action to classify pathogenic bacteria into different types with extreme fineness, which is extremely useful for tracking the source of infection in bacterial diseases epidemiology. In clinical medicine, bacterial viruses have been tried to treat certain bacterial infections. Anti-tumor drugs can be screened and carcinogens checked for the induction of lysobacteria. Bacterial virus contamination may cause great damage to the fermentation industry (such as food industry, antibiotic industry, etc.)

Loss, so preventing and controlling this pollution is also an important task.

4.

Pharmacology is the biology of drugs, including the mechanism of action of drugs, the receptors of drugs in the body, the strength and time course of drug-receptor binding. The intensity and time course of the biological effect.

Some bacterial viruses, such as *Pseudomonas aeruginosa* phage, can treat related diseases. Burn patients are susceptible to infection with *Pseudomonas aeruginosa*, which can cause purulent infections, and it is not easy to control. Scientists using *Pseudomonas aeruginosa* phage can effectively treat the purulent sensation of burn patients. Because *P. aeruginosa* phage is a bacterial virus, it lives and reproduces in *P. aeruginosa*, making *P. aeruginosa* unable to live.



The virus has no cell structure, only the outer shell of the protein and the internal genetic material. The virus cannot live independently and can only parasitize in other organisms. According to the different hosts of virus parasites, we divide viruses into plant viruses, animal viruses and bacterial viruses. Bacterial viruses are also called phages. Viruses that are specifically parasitic in plant cells are called plant viruses, such as tobacco mosaic virus; viruses that are parasitic in animal and human cells are called animal viruses, such as HIV, avian influenza virus, etc.; viruses that are specifically parasitic in bacteria are called bacterial viruses (Also called phage), such as E. coli phage. So the answer is: plant virus; animal virus; phage; protein; genetic material

Viruses are the smallest of pathogenic microorganisms. They multiply in cells. The core of the virus is ribonucleic acid (RNA) or deoxyribonucleic acid (DNA). The outer shell is a protein and does not have a cellular structure. The virus is parasitic in the host cell and relies on the host cell's metabolic system for proliferation and replication. Viral nucleic acids and proteins are synthesized under the control of genetic information provided by viral genes, and then assembled into mature infectious virions in the cytoplasm, released from cells in various ways and infecting other cells. Most viruses lack an enzyme system and cannot live on their own. They must rely on the host's enzyme system to reproduce (replicate) themselves. Viral nucleic acids are sometimes integrated in cells and cannot be easily eliminated. Therefore, the development of antiviral drugs is slow.

Viral diseases are the main infectious diseases of human beings. Viruses can invade different tissues and organs and infect cells to cause diseases. Common diseases caused by viruses are:

- ① Epidemic diseases: influenza, common cold, measles, mumps, polio, infectious hepatitis, polio;
- ② Chronic sensibility: Hepatitis B, AIDS
- ③ Latent infection: herpes keratitis, STD herpes virus and tumors: some tumors.

The antiviral drugs are: ribavirin emandelamide, acyclovir, dextracyclovir, polyamycin, interferon, amantadine, aureneuridine, arasine, azidothymidine, dideoxythymidine, ganciclovir, and herceptin

Ribavirin

Ribavirin (ribovirin, Virazole)

Amantadine hydrochloride

Acyclovir

Deoxycyclovir desiclovir

Deoxycyclovir desiclovir, deoxyaprovir, 6-Deoxyacyclovir, BW-51U.

The mechanism of action is the same as that of acyclovir. This product is an acyclovir prodrug, which is well absorbed orally and used in combination with α-interferon to inhibit all HBV markers during treatment. See Aprove for the rest.

Polyinosinic acid

Interferon

Interferons

Amantadine hydrochloride

Amantadini Hydrochloridum

Briwood

Orenuridine, Hurpin, Brilludine, Aethoxyuridine, Afuridine

Virus Spirit

Zidovudine

Azidothymidine Azidodeoxythymidine, Zidovudine, Azidothymidine, Retrovir, AZT.

It is mainly used to treat AIDS. Patients with complications (pneumocystis carinii or other infections) should be treated with other symptomatic drugs.

Dideoxythymidine

Ganciclovir

Iodoglycosides

Telbivudine

Such as prednisone, methylprednisone; calcineurin inhibitors, such as cyclosporine, tacrolimus, etc.; antiproliferative / antimetabolites, such as sirolimus, azathioprine, methotrexate, Cyclophosphamide, etc.; antibodies, anti-lymphocyte globulin, molimumab, baliximab, etc. In addition, Tripterygium glycosides are often used in the treatment of autoimmune diseases. Among them, calcineurin inhibitors are currently the most effective immunosuppressive drugs in clinical practice.

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.Selection and Confirmation of Drug Targets and Biomarkers

In the early days, people had limited knowledge of the target of drug action, and often only knew that it worked, but didn't know how to work. For example, for a century, people have known that aspirin has antipyretic, anti-inflammatory,

analgesic, antithrombotic, and even anticancer effects. It was not until 1971 that the British John R. Vane published a paper in the journal Nature that clarified the mechanism of action of Aspirin to inhibit prostaglandin synthesis, and was awarded the Nobel Prize in Physiology and Medicine in 1982. The research progress of modern biomedicine and the establishment of human gene maps allow humans to understand the mechanism of disease more accurately, and provide a clear direction and specific targets for the development of new drugs.

#### Identification of lead compounds

Once the target for drug action is selected, the medicinal chemist (first must find a compound that has an effect on the target. This compound can be derived from natural products; or it can be a compound designed and synthesized by computer simulation based on the spatial structure of the target; It can also be found according to literature reports or previous research projects. For example, a certain type of compound has pharmacological activity or side effects on the target, etc. Viagra, a drug used to treat erectile dysfunction, was developed from its side effects. At present we commonly use the method to track the drug development of a target by foreign R & D institutions,

#### Study of structure-activity relationship and screening of active compounds

A large number of new compounds are designed and synthesized around the lead compounds, and the structure-activity relationship analysis of the synthesized compound activity data and the compound structure is used to further effectively guide the subsequent optimization and modification of the compound structure in order to obtain more active compounds.

#### Selection of candidate

Through structure-activity relationship studies, several rounds of optimization have been performed to select all the best compounds that meet the basic biological activity.

#### Pre-clinic toxicology studies

After the candidate drug is determined, the new drug research and development enters the development stage. The goal of the first stage of drug development is to complete preclinical toxicology research and submit an application for "experimental new drug" to the drug regulatory department. New drug development requires multidisciplinary collaborations, such as process chemistry, toxicology, pharmacology, pharmacokinetics, formulations, etc. In addition, all majors require the support of analytical chemistry.

#### Chemistry, Manufacturing and Control

The first step in the development of new drugs is Process R & D, which is a process of continuous improvement and improvement. The first batch of APIs provided is mainly used for toxicology research (100-1000g), the faster the better, the cost is not a major consideration. Therefore, as long as the pharmacological route can achieve toxicological batch synthesis, the process research and development department will adopt it. However, as the project progresses, the technology department will design a new synthesis route as needed, and develop a reasonable production process to meet the needs of Phase I-III clinical drug use and commercialization. Similarly, the preparation department will first give the simplest form. Drug, complete toxicology research, and then continue to complete the formulation process research to develop a commercial preparation process.

#### B Pharmacokinetics (PK)

To understand the absorption, distribution, metabolism, and excretion of drugs in animals, these data can guide clinical studies in the form of administration (oral, inhalation, injection), frequency and dose.

#### C Safety Pharmacology

Prove that the compound is biologically active against a specific target disease, and evaluate the effects of the drug beyond its efficacy, such as possible side effects, especially the cardiovascular, respiratory, and central nervous system effects.

#### D. Toxicological research

There are many types of toxicology studies, including acute toxicity, subacute toxicity, chronic toxicity, reproductive toxicity, carcinogenicity, and mutagenicity. In order to accelerate the early verification of the effectiveness of new drugs, especially for some anticancer drugs, some time-consuming and expensive toxicology experiments (such as carcinogenicity and reproductive toxicity) are allowed to be carried out at the clinical trial stage.

#### E preparation development

Formulation development is an important part of drug development. Design and manufacture of compound drugs or pure botanical drugs. Chemical structure modification, superposition and recombination, and avoiding mutual chemical reactions of drugs are particularly critical. The specific drugs for anti-coronary pneumonia include biochemical drugs, vaccines, gene drugs, etc. The chemical structure of the compound drug is more complicated than the former, and the subsequent engineering amount of design, experiment, and manufacture is still large.

5.

<< 5 + 2 medical plan >>, << 7 + 3 medical plan >> for clinical application of effective and efficient treatment of new coronavirus pneumonia

1 Antiviral drugs The main drugs are suitable for patients with severe or severe illness. Antiviral drugs are only a kind of virus inhibitors.

The principle of antiviral effect lies in:

First, it can prevent the virus from adsorbing to host cells, such as gamma globulin.

Second, prevent viruses from entering host cells, such as amantadine.

Third, inhibit the replication of viral nucleic acids, thereby inhibiting the reproduction of viruses, such as acyclovir, ganciclovir, valacyclovir, lamivudine, adefovir, and so on.

Fourth, it can inhibit the synthesis of viral proteins, such as indinavir and ritonavir.

Fifth, it can induce host cells to produce an antiviral protein and inhibit the proliferation of many viruses, such as interferon.

Sixth, interfere with the release of viruses from host cells, such as oseltamivir.

Clinically used drugs for herpes virus infection include acyclovir, valacyclovir, famciclovir, and adenosine arabinoside.

Drugs used for cytomegalovirus infection can be ganciclovir, so different virus types are used. The drugs are also different.

New drug Remdesivir for injection is undergoing clinical trials.

2 Immune drugs Main drugs Suitable for patients with severe or severe illness, glucocorticoids

2. Calcineurin inhibitors

Cyclosporin

Tacrolimus

3. Antimetabolites

Azathioprine

Methotrexate

Mercaptopurine

Mycophenolate mofetil

4, alkylating agent

Cyclophosphamide

Busulfan

Thiotepa

5. Antibodies

1. Lack of selectivity and specificity, and inhibits both normal and abnormal immune responses.

2. It has a strong inhibitory effect on the primary immune response and a weak inhibitory effect on the secondary immune response.

3. The drug effect is closely related to the time of administration and the time interval and sequence of antigen stimulation.

4. Most drugs still have non-specific anti-inflammatory effects.

5. After long-term application, in addition to the unique toxicity of each drug, adverse reactions such as reducing the body's resistance and inducing infection, increasing the incidence of tumors, and affecting the function of the reproductive system are still easy to occur. Calcineurin inhibitor

Cyclosporin (cyclosporin, cyclosporin A) is a fat-soluble cyclic undecapeptide compound produced by the mold *Tolypocladium inflatum*. It selectively acts on the early stage of T lymphocyte activation. Helper T cells are activated to produce the proliferation factor interleukin 2, IL-2, and cyclosporine can inhibit its production; however, it has no effect on suppressor T cells. Another important role is to inhibit the production of interferon by lymphocytes. It has no effect on phagocytic cells of the reticuloendothelial system. Therefore, cyclosporine is different from cytotoxic drugs in that it only inhibits T cell-mediated cellular immunity without significantly affecting the general defense ability of the body.

Cyclosporine is mainly used in clinical practice to prevent adverse immune reactions such as rejection during allogeneic organ or bone marrow transplantation, and is often used in combination with glucocorticoids. The clinical application in the treatment of autoimmune diseases is still being explored.

Commonly used alkylating agents: cyclophosphamide, busulfan, thiotepa, etc. They can selectively suppress B lymphocytes, and large doses can also suppress T lymphocytes. It can also inhibit immune blasts, thereby blocking humoral and cellular immune responses. The effect of cyclophosphamide is obvious,

Selective inhibition of T cells, in the early stage of T cell activation, has a weaker inhibitory effect on B cells.

Inhibits production of IL-1 by macrophages.

Inhibits the expression of IL-2 receptors by antigen or mitogen-activated lymphocytes.

It has no obvious inhibitory effect on NK cells, but can indirectly affect the vitality of NK cells by interfering with the production of IFN- $\gamma$ . In vivo processes of cyclosporine

Oral absorption is rapid, but incomplete absorption due to first pass elimination. The blood concentration reached a peak in 0.5 ~ 3 h,  $t_{1/2}$  was 5 ~ 8 h, and the effective concentration continued for 12 h. Mainly metabolized by the liver, metabolites are excreted by feces.

3 Pneumonia drugs and vaccines The main drugs are suitable for patients with severe and critical illness, the impact of compound antibacterial drugs combined with azithromycin on the inflammatory indexes of lobar pneumonia

The main drug of 4 gene drugs is suitable for patients with severe or severe illness, interferon (IFN) series, interleukin (IL) series, colony stimulating factor (CSF) series, erythropoietin (EPO), basic fibroblast factor (BFGF), other cytokine drugs of concern are tumor necrosis factor (TNF). Hepatocyte growth factor (HGF), nerve growth factor (NGF), etc.

5 Anti-infective drugs The main drugs are suitable for patients with severe or severe illness

Respiratory infectious disease drugs The main drug is suitable for patients with severe and critical illness

Botanical drugs Pure botanical drugs (Gold and Silver Peanut Astragalus Radix Ginseng Ginseng, Codonopsis Astragalus, Guizhi, Zhiheche, Tremella, Jujube Kernel, Jujube Salvia Miltiorrhiza, Peach Kernel, Safflower, Turmeric, Chicken Blood Vine, Pueraria Root, etc. Moderate and trace amount of anti-virus, enhance immunity, treat respiratory symptoms such as pneumonia, etc.) It is suitable for patients with severe or severe illness, decoction or pills

Antiviral and antipyretic honeysuckle are the most common Chinese medicine. Honeysuckle has a very significant effect on the suppression of influenza virus pneumonia, and is often used as a traditional Chinese medicine for clearing heat and detoxifying. Clinical experiments have proven that it can have a very effective preventive effect against influenza viral pneumonia. Forsythia is also often used as a heat-clearing and antiviral drug. Forsythia is rich in hypericin and has significant effects in the treatment of viral infections in poultry. It can treat infectious bronchitis virus and poultry infection virus, and has obvious bactericidal effect.

The antiviral effect of Ganoderma Lucidum is also very good. He can effectively inhibit the growth of viruses in the body and play a bactericidal role. Ginseng, which we are familiar with, is also one of the antiviral Chinese medicines. It has a strong protective effect on virus-infected cells. The ingredients in ginseng have a significant inhibitory effect on rabies virus.

Takino chrysanthemum is also a commonly used antiviral drug, which has a very strong effect of clearing heat and detoxifying, can inhibit the activity of influenza virus, and can be used as a preventive drug for influenza virus.

Viral pneumonia is caused by adenovirus, respiratory syncytial virus, influenza virus, parainfluenza virus, coxsackie virus, and ecovirus, etc. There are symptoms of upper respiratory infection before onset, white blood cell count is normal or low, and antibiotic treatment is not effective.

At present, there is no ideal antiviral drug. Therefore, the treatment of viral pneumonia is mainly symptomatic. At the same time, care should be taken to prevent complications, and antibiotics are not necessary when there is no bacterial infection. There are several antiviral agents commonly used in clinical practice.

(1) Ribavirin: It can inhibit a variety of DNA and RNA viruses. It is a broad-spectrum antiviral drug with low toxicity. The route of administration is nasal drip, buccal administration, nebulized inhalation, intramuscular injection, intravenous drip, etc.

Nasal drops: 5% ribavirin solution 5mg / ml, nose drops every 2 hours. Tablets: Each tablet contains 2mg of ribavirin, It is effective for adenoviral pneumonia and respiratory syncytial virus pneumonia.

(2) Interferon: It can inhibit the replication of intracellular virus, interrupt the spread of inflammation, and improve the phagocytosis ability of macrophages.

(3) Polymyocyte: an interferon inducer,

(4) Shuanghuanglian powder injection: It is extracted from traditional Chinese medicine and has antiviral effect.

In addition, modern pharmacological studies have confirmed that many traditional Chinese medicines have good antiviral effects, such as Daqingye, Isatis indigotica, Forsythia, Forsythia, Shegan, Scutellaria baicalensis, Coptis chinensis, Houlttuynia cordata, Chrysanthemum, wild chrysanthemum, Bupleurum, burdock, Guanzhong, Lithospermum, Tilia, Red sedge, Danpi, Prunella vulgaris, raw licorice, Polygonatum sibiricum, Fatty sea, Hu Huanglian, etc. Therefore, in the treatment of viral pneumonia, taking decoction can also have a good effect.

Compound drugs Structural modification of chemical drugs and pure botanical drugs, with powerful effects and obvious effects (modification of antiviral drugs +) Suitable for patients with severe or severe illness (1) Igglbulin (2) Indinavir, ritonavir

(3) Amantadine

(4) Interferon

The right amount of these chemicals is Daqingye, Isatis indigotica, Silver flower, Forsythia, Shegan, Scutellaria baicalensis, Coptis chinensis, Houlttuynia cordata, Chrysanthemum, wild chrysanthemum, Bupleurum, Arctium lappa, Guanzhong, sage, aster Botanicals, prunella vulgaris, raw licorice, huangji, fathai, huanghuanglian and other botanical drugs are combined or chemical drugs and botanical drugs are purified and compounded. In order to avoid adverse chemical structural reactions and iatrogenic interference of drugs, it is necessary to do Fine chemical production of composite technology to ensure the reliability, safety and redundancy of composite products.

Biochemical drugs Bacterial pneumonia drugs Influenza drugs Adjuvant drugs etc. General patients chloroquine phosphate etc.

10. Animal Coronavirus Pneumonia Drugs Adjuvant Drugs General Patients

11. Coronavirus preventive drugs (anti-infective drugs) A. Compound preparation

B. Biochemical Drug C. Pure botanicals (use the dosage and individual differences, increase and decrease as appropriate)

Based on a large number of clinical cases and death cases, combined with pathological anatomy of experts and professors and pathogen research, including the etiology and production of new coronavirus pneumonia, there are many research results and experience in prevention and treatment. Corresponding cities around the world are worthy of recognition. It is a very special means in the extraordinary period, and it is a last resort. The outbreak of the plague has swept the world, and the consequences of this good strategy can be imagined. However, the closure of the city cannot fundamentally eliminate and treat the disease. Only effective and effective technologies and drug vaccines can be effective and effective, and can save the lives of more people.

(A) The new coronavirus has considerable homology and heterogeneity with infectious pneumonia coronaviruses such as Sars and respiratory infections in the Middle East. The basic commonalities between the two cannot be denied, but there are certain differences and characteristics. Whether the mutation and evolution of the coronavirus requires further research and experiments to prove.

(B) About the origin of this type of virus The new coronavirus is basically conclusive with human animals. The invasion and spread of animal (plant) coronavirus and coronavirus pneumonia to humans are first affirmed. (Of course, it is not absolutely ruled out. Spontaneous spontaneous cases of patients without contact and infection, family history, history of infectious diseases, history of lung diseases, regional environment, bacterial pneumonia, respiratory infections, immune deficiency syndrome, climate, vegetation environment, Diseases caused by diet, etc., other viruses may also be converted into new coronaviruses. (Of course, viral and bacterial infections are the most important).

(C) The lung is an extremely important physiological organ for human beings. The mortality rate of lung diseases such as pneumonia, lung cancer and tuberculosis is extremely high. The number of deaths from lung diseases every year in the world is tens of millions. Pneumonia is a large-scale epidemic of respiratory infectious diseases. No matter bacterial pneumonia or viral pneumonia, pneumonia is particularly susceptible and susceptible to death in the winter and spring season. Mortality from viral pneumonia is also extremely high. Therefore, medical scientists are often veterinarians, and medicine and veterinary virology and bacteriology are closely related.

(D) The new type of coronavirus pneumonia is not theoretically an incurable disease. It is as killing human as AIDS and cancer, and there is no cure for it. For most patients, health care will be restored as long as they are carefully treated. Of course, it is extremely dangerous for certain groups such as critically ill, old, weak, and young, and the mortality rate is as high as 59.8% -97.8%. Of course, there are also other factors such as race, family, regional epidemic history, individual difference medicine, treatment technology prevention technology and other factors. Only by analyzing the data and computer models of cases and deaths in countries around the world can science be achieved. The conditions of specific treatments are different in different countries around the world, and the data may be changed. That is quite normal, and no need to be surprised.

(E) Coronaviruses and bacteria exist widely in the microbial and biological worlds in nature. They live in symbiosis with animals and plants as well as humans. They will dance with humans for a long time and will not easily die.

Therefore, the prevention and control of new-type coronary pneumonia is not only temporary, but also a long-lasting protection war for human beings. If the paralysis is loosened, viruses and illnesses will come back and give humans a devastating attack. This is especially true for susceptible populations, seasons and regions. Respiratory infectious diseases pneumonia itself is susceptible to common and common infectious diseases, which is no less harmful than infectious diseases such as large-scale influenza hepatitis. This year has passed, and next year, strict control is needed. Viruses are also evolving genetic mutations, otherwise humans would still have to pay extremely high prices for this.

(F) Virology Involved Virology of Human Infectious Diseases Animal Virology Medicine and Veterinary Medicine Microbiology and plant virology

Infectious Diseases

Pneumonia

cytology

molecular biology

Pharmaceutical chemical structure Pathology and pharmacology Drug screening, drug design, modification of pharmaceutical chemical structure, intermediate of pharmaceutical chemical structure, etc.

Immunology

Respiratory infectious disease virology

Molecular biology and many other disciplines and biomedical fields are extensive and complex.

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